Morphological skills across child populations:
The effects of bilingualism and developmental dyslexia

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In this talk, I will report about the results of four studies conducted on Italian children’s language abilities in the frame of the 7FP project AThEME, Advancing the European Multilingual Experience. The targeted groups comprise monolingual and bilingual children, with typical development and affected by developmental dyslexia. The studies aimed at investigating morphological skills across child populations with different linguistic and cognitive profiles and, in particular, at exploring the effect of bilingualism and dyslexia on performance in several elicited production tasks. All of the tasks employed in the studies are revisited versions of the original Wug Test (Berko 1958); accordingly, they elicit the production of plurals and other types of inflected and derived forms making use of nonce words created in compliance with the morphophonological rules of Italian.

Study 1 and study 2 deploy the same materials and investigate the children’s ability to create the plural forms of attested and invented nouns, distributed into 5 conditions corresponding to the declension classes of Italian nominal inflection.

i. Study 1 targets the effect of dyslexia on word and nonce-word pluralization. Two groups are compared, i.e. dyslexics and typically developing peers matched for age and other criteria. Dyslexic children show an especially weak performance, even in the easiest conditions of noun pluralization, pointing to a negative effect of dyslexia on the children’s ability to create plural nonce words. Interestingly, no difference was found in the pluralization of real words, revealing that the difficulties concern the dyslexics’ ability to apply the relevant pluralization rules. Correlations with phonological awareness, reading and working memories skills are also found (cf. Vender, Mantione, Savazzi, Delfitto & Melloni, 2017).

ii. Study 2 focuses on the role of bilingualism and its interplay with dyslexia. Four groups are compared, i.e. monolingual dyslexics and their typically developing peers, bilingual dyslexics and their typically developing peers (i.e. all bilinguals were early L2-Italian learners). Monolingual dyslexics show the weakest performance; a positive effect of bilingualism is found, which also extends to dyslexia (cf. Vender, Hu, Mantione, Savazzi, Delfitto & Melloni, 2018).

Study 3 and study 4 deploy the same materials and investigate the children’s ability to create not only plural forms, but also inflected and derived forms of (mainly) verbal bases and to retrieve base forms from inflected and derived nonce words, in a protocol comprising eleven tasks. Conditions in each task mainly correspond to the three conjugation forms of the nonce-verb basis. In these studies, all the target forms were nonce words, but real words were given in a training preliminary to each task to enhance the subjects’ comprehension of the task.

iii. Study 3 investigates further into the role of bilingualism, and specifically addresses the question of L1/L2 similarity and potential transfer effects from the children’s L1 onto L2 Italian (in studies 1 and 2 the bilingual children had different L1s). Three groups are compared: Romanian-Italian bilingual children, Albanian-Italian bilingual children, and monolingual Italian children. Significant differences were found only in three out of eleven tasks, and replicated the positive result of study 2, with bilinguals outperforming monolinguals in nonce word pluralization. A mild negative effect of
bilingualism was found in two tasks out of eleven, indicating that bilingualism per se does not positively affect the subjects’ morphological abilities. Even more interestingly, however, bilingualism does not result in a (consistently) weaker performance, pointing to the fact that the ability to apply subtle morphological rules in the L2 is not impaired when dealing with two languages on a daily basis and with early exposure to the L2. Moreover, no significant difference in performance was found between the two groups of bilinguals in any of the task, limiting the role allegedly played by transfer effects (cf. Melloni, C., M. Vender, D. Delfitto, in press).

iv. Study 4 investigates the effect of developmental dyslexia on performance in the morphological tasks. Two groups are compared, i.e. dyslexics and typically developing peers matched for age and other criteria. In line with previous results, dyslexia emerges as a negative factor, resulting in a significantly poorer performance in six out of eleven tasks. Dyslexic subjects are especially impaired in inflection (tasks 1-2) and in base retrieval (tasks 9-10-11). (study in preparation).

In future research, we will administer the protocol in studies 3 and 4 to a group of bilingual children diagnosed with dyslexia, in order to assess the effect of bilingualism, if any, on dyslexia in the inflectional and derivational domains of morphology.

References

Acknowledgements
The studies presented have been designed, administered, and the results interpreted by a team of researchers, among which Dr. Maria Vender and Prof. Dr. Denis Delfitto. I thank all of my coauthors for allowing me to present these materials. As the first author of studies 1. and 2. and crucially involved in all the studies, Dr. Vender is especially acknowledged.

The research leading to studies 1 and 2 has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement n° 613465.